

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for measuring a plasticity of a material such as a ceramic raw material or mass, the method comprising the steps of:

(a) setting a sample body on a force measurement device comprising a force transducer adapted to vibrate upon an impact;

(a) (b) deforming a said sample body by impacting said sample body with a weight, wherein said impacting causes said force transducer to produce a vibration;

(b) (c) measuring a movement of said weight over time during a deformation of said sample body until an end of said deformation;

(c) (d) generating a path signal based on said movement of said weight, wherein said path signal is proportional to said deformation of said sample body;

(d) (e) measuring a reaction force of said sample body over time during said deformation of said sample body until said end of said deformation;

(e) (f) generating a force signal, wherein said force signal is proportional to said reaction force; and

(g) superimposing said vibration of said force transducer onto said force signal;

(h) detecting a damping behavior of said vibration by said sample body; and

(f) (i) processing and evaluating said path signal and said force signal with a computer.

Claim 2 (original): The method according to claim 1, further comprising the step of dropping said weight onto said sample body from a pre-determined height.

Claim 3 (original): The method according to claim 2, wherein said weight impacts said sample body in a free fall.

Claim 4 (original): The method according to claim 1,

wherein said weight impacts said sample body at a regulated speed.

Claim 5 (currently amended) A device for measuring a plasticity of a material such as a ceramic raw material or mass by impacting and deforming a sample body with a weight and measuring a movement of the weight and a reaction force of the sample body over time during a deformation of the sample body, the device comprising:

(a) a force measurement device for measuring the reaction force of the sample body during the deformation, wherein said force measurement device is adapted to vibrate upon an impact;

(b) a sample table disposed on said force measurement device;

(c) a guide disposed above said sample table wherein said guide is for guiding the weight which impacts the sample body; and

(d) a path sensor for detecting a movement of the weight;

wherein a path signal which is proportional to the

deformation of the sample body is generated based on the movement of the weight, a force signal which is proportional to the reaction force is generated, a vibration of said force measurement device is superimposed onto said force signal, a damping behavior of said vibration is detected by the sample body, and said path signal and said force signal are measured until an end of the deformation and evaluated.

Claim 6 (original): The device according to claim 5, further comprising a computer coupled to said force measurement device and said path sensor.

Claim 7 (original): The device according to claim 5, wherein said force measurement device comprises a load cell.

Claim 8 (original): The device according to claim 7, wherein said load cell is inherently resilient.

Claim 9 (original): The device according to claim 7, further comprising a separate spring system comprising a transducer, wherein said load cell is mounted on said separate spring system.

Claim 10 (original): The device according to claim 5,

wherein said guide comprises a linear guide.

Claim 11 (original): The device according to claim 5, wherein said guide comprises a lever, wherein the weight is disposed on said lever and said lever is rotatable about an axis of rotation.

Claim 12 (original): The device according to claim 11, wherein a height of said axis of rotation is adjustable.

Claim 13 (original): The device according to claim 5, wherein said guide comprises a lever having a parallelogram guide.

Claim 14 (cancelled).